1. (Amended) An animated toy system comprising:

a toy figure having a body portion and at least one movable portion;

a loudspeaker situated within the body;

an actuator situated within the toy for moving the movable portion in response to the toy receiving [a digital data] <u>logic-control</u> signals;

means for transmitting <u>an analog sound signal</u> to the loudspeaker and the [data] <u>logic-control</u> signals to the actuator and

a multimedia [home computer] system including,

a sound subsystem for generating [a] said analog sound signal representing spoken words for transmission to the loudspeaker over the means for transmitting,

memory for storing an array of [digital control codes] <u>data representing said</u> <u>logic-control signals and correlated to said spoken words</u> [representing movement of the actuator for movement of the movaple portion],

[a data interface for generating, based on the digital control codes, the digital data signals for transmission over the means for transmitting], and

means for causing sequential transmission of [the digital data] <u>said logic-control</u> signals [from the data interface] according to a predetermined synchronization with the transmission of [the] <u>said analog</u> sound signal by [the] <u>said sound [card] subsystem.</u>

- 2. (Amended) The system of Claim 1 wherein the at least one movable portion includes a mouth and the [drive control codes] <u>logic-control signals</u> represent movement of the mouth in synchronization with transmission of the <u>analog</u> sound signal to simulate speaking.
- 3. (Amended) The system of Claim 1 wherein the multimedia [home computer] system further includes means for deriving the array of [digital control codes] logic-control signals from [a] text [file] data and the sound card includes a speech synthesizer for synthesizing [a] said analog sound signal representing the words in the text data [file from the text file].



- 4. (Amended) The system of Claim 3 further including a [sound] dictionary [file] stored on the [computer] <u>multimedia system</u> and wherein the speech synthesizer looks up a sound signal for the [textual words] <u>text data</u> in the [sound] dictionary.
- 5. (Amended) The system of Claim 4 wherein <u>said</u> [sound] dictionary [file] includes predetermined digital control codes for each word and the [home computer] <u>multimedia system</u> includes means for constructing [the array from the digital control codes in the dictionary file] <u>and sequencing the array of logic-control signals from the dictionary</u>.
- 8. (Amended) The system of Claim 5 wherein the means for [deriving] constructing and sequencing the array of (binary digital codes) logic-control signals includes means for identifying whether a letter in a word of text data is a vowel and for assigning to each letter in each word in the text [file] data a [binary digital code] logic-control signal indicating a position of the movable portion [whether the mouth is to be open or closed].
- 9. (Amended) The system of Claim 1 wherein the sound subsystem further includes means for recording spoken words and the computer] multimedia system includes means for recognizing the spoken words.
 - 10. (Amended) The system of Claim 9 wherein, the means for recognizing the spoken words generates [a text file] text data,

the multimedia [home computer] <u>system</u> further includes means for deriving the array of [binary digital codes] <u>logic-control signals</u> from the text [file] <u>data</u>, and

the sound [card] <u>subsystem</u> includes a speech synthesizer for synthesizing [a] <u>said</u> <u>analog</u> sound signal [representing the spoken words in the text file] from the text [file] <u>data</u>.

11. (Amended) The system of Claim 1 wherein the toy figure includes a second actuator for moving a second[, articulating member,] movable portion and the [digital control code] array of said logic-control signals includes a second dimension for storing [digital control codes] logic-control signals for the second actuator.



- 12. (Amended) The system of Claim 1 wherein the [computer] <u>multimedia system</u> includes a monitor and means for displaying animation on the monitor in coordination with <u>said</u> <u>at least one movable portion</u> [talking of the toy].
- 13. (Amended) The system of Claim 1 wherein the means for transmitting includes a cable having on one end a first plug for connecting with a first electronic circuit forming part of the sound subsystem and a second plug for connecting with a second electronic circuit [forming the] comprising an input/output port, and connecting at the opposite end with the toy figure.
 - 14. (Amended) An animated talking toy system comprising:
 - a toy figure having a body and a moveable mouth;
 - a loudspeaker situated within the body;

an actuator having only two-phases for moving the mouth in <u>a</u> first direction in response to receiving a first [binary digital data] <u>logic-control</u> signal [representing] <u>corresponding to</u> a first predefined binary value and in <u>a</u> second direction in response to receiving a second [binary digital data] <u>logic-control</u> signal [representing] <u>corresponding to</u> a second <u>predefined</u> binary value;

means for transmitting [a] an analog sound signal to the loudspeaker and the first and second [binary digital data] logic-control signals to the actuator; and

a multimedia [home computer] system including,

a sound [card] <u>subsystem</u> for generating [a] <u>said analog</u> sound signal representing spoken words for transmission to the loudspeaker over the means for transmitting,

memory for storing an array of [binary digital control codes] said first and second predefined binary values, said binary values representing said logic-control signals for controlling the [representing] movement of the actuator for articulation of the mouth to simulate speaking,



[a data interface for generating based on the array a sequence of first and second binary digital data signals for transmission to the actuator over the means for transmitting,] and

means for causing sequential transmission of the first and second [binary digital data] <u>logic-control</u> signals according to a predetermined synchronization with transmission of the <u>analog</u> sound signal by the sound subsystem.

- 15. (Amended) The system of Claim 14 wherein the actuator includes a switch operable by the [binary digital data] <u>logic-control</u> signal for switching current to a solenoid for causing movement of an element in response thereto for moving the mouth.
- 16. (Amended) The system of Claim 15 wherein the element of the solenoid is coupled [by a string] to a pivoting portion of the mouth for applying torque to rotate the pivoting portion in a first direction against a biasing force applied by a spring to the pivoting portion in an opposite direction.
- 17. (Amended) The system of Claim 14 wherein the multimedia [home computer] system further includes means for deriving the array of [binary digital codes] logic-control signals from [a] text [file] data and the sound [card] subsystem includes a speech synthesizer for synthesizing a sound signal representing the spoken words in the text data [file from the text file].
- 18. (Amended) The system of Claim [14] <u>17</u> further including a [sound] dictionary [file] stored on the [computer] <u>multimedia system</u> and wherein the speech synthesizer looks up a sound signal for the [textual words] <u>text data</u> in the [sound] dictionary.
- 19. (Amended) The system of Claim 18 wherein [sound] <u>said</u> dictionary [file] includes predetermined digital control codes and the [home computer] <u>multimedia system</u> includes means for creating <u>and sequencing</u> the array of [digital control codes] <u>logic-control signals from the digital control codes</u>.

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- 20. (Amended) The system of Claim 14 wherein the sound subsystem further includes means for recording spoken words and the [computer] <u>multimedia system</u> includes means for recognizing the spoken words.
 - 21. (Amended) The system of Claim 20 wherein,

the means for recognizing the spoken words generates [a] text data [file],

the multimedia [home computer] <u>system</u> further includes means for deriving the array of [binary digital codes] <u>logic-control signals</u> from the text <u>data</u> [file], and

the sound <u>subsystem</u> [card] includes a speech synthesizer for synthesizing a sound signal representing the spoken words in the text <u>data</u> [file from the text file].

- 22. (Amended) The system of Claim 14 wherein the toy <u>figure</u> includes a second actuator [for moving a second, articulating member,] and the [digital control code] array <u>of logic-control signals</u> includes a second dimension for storing [digital control codes] <u>logic-control signals</u> for the second actuator.
- 23. (Amended) The system of Claim 14 wherein the computer includes a monitor and means for displaying animation on the monitor in coordination with [animation of the toy] movement of said moveable mouth.
 - 24. (Amended) The system of Claim 14 wherein the means for transmitting includes a cable having on one end a first plug for connecting with a first electronic circuit forming part of the sound subsystem and a second plug for connecting with a second electronic circuit forming (the) an input/output port.
 - 25. (Amended) An animated talking toy figure comprising:
- a small figure [with an appearance simulating that of a living animal, being or creature, the figure] including a body and a moveable mouth;
 - a loudspeaker situated within the body;



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an actuator situated inside the figure having only two-phases for moving the mouth in <u>a</u> first direction in response to receiving a first [binary digital data] <u>logic-control</u> signal representing a first binary data value and in [the other] <u>an opposite</u> direction in response to receiving a second [data] <u>logic-control</u> signal representing a second binary data value; and

an elongated cable extending from the toy for [receiving] coupling an analog audio signal [for] to the loudspeaker and [a binary digital control signal] said logic-control signals [to be used as a logic input for a switch for connecting power to drive the actuator] to said actuator.

- 26. (Amended) The animated talking toy figure of Claim 25 wherein the actuator further comprises a solenoid and [the] a switch, said logic-control signals selectively activating said switch to switch [switches] current to the solenoid for movement of an element.
- 27. (Amended) The system of Claim [25] <u>26</u> wherein the element [of the solenoid] is coupled [by a string] to a pivoting portion of the mouth for applying torque to rotate the pivoting portion in a first direction and wherein the actuator further includes a spring for applying a biasing force to the pivoting portion in an opposite direction to the force applied by the string.
- 28. (Amended) The system of Claim 25 wherein the figure further includes a moving arm and a second actuator having only two-phases for moving the arm, the <u>second</u> actuator moving the arm in <u>a</u> first direction in response to receiving a [third binary digital data] <u>first logic-control</u> signal [representing of the first binary value] and in [the] an opposite direction in response to receiving <u>a second logic-control signal</u> [the fourth binary digital representing the second binary value].

